

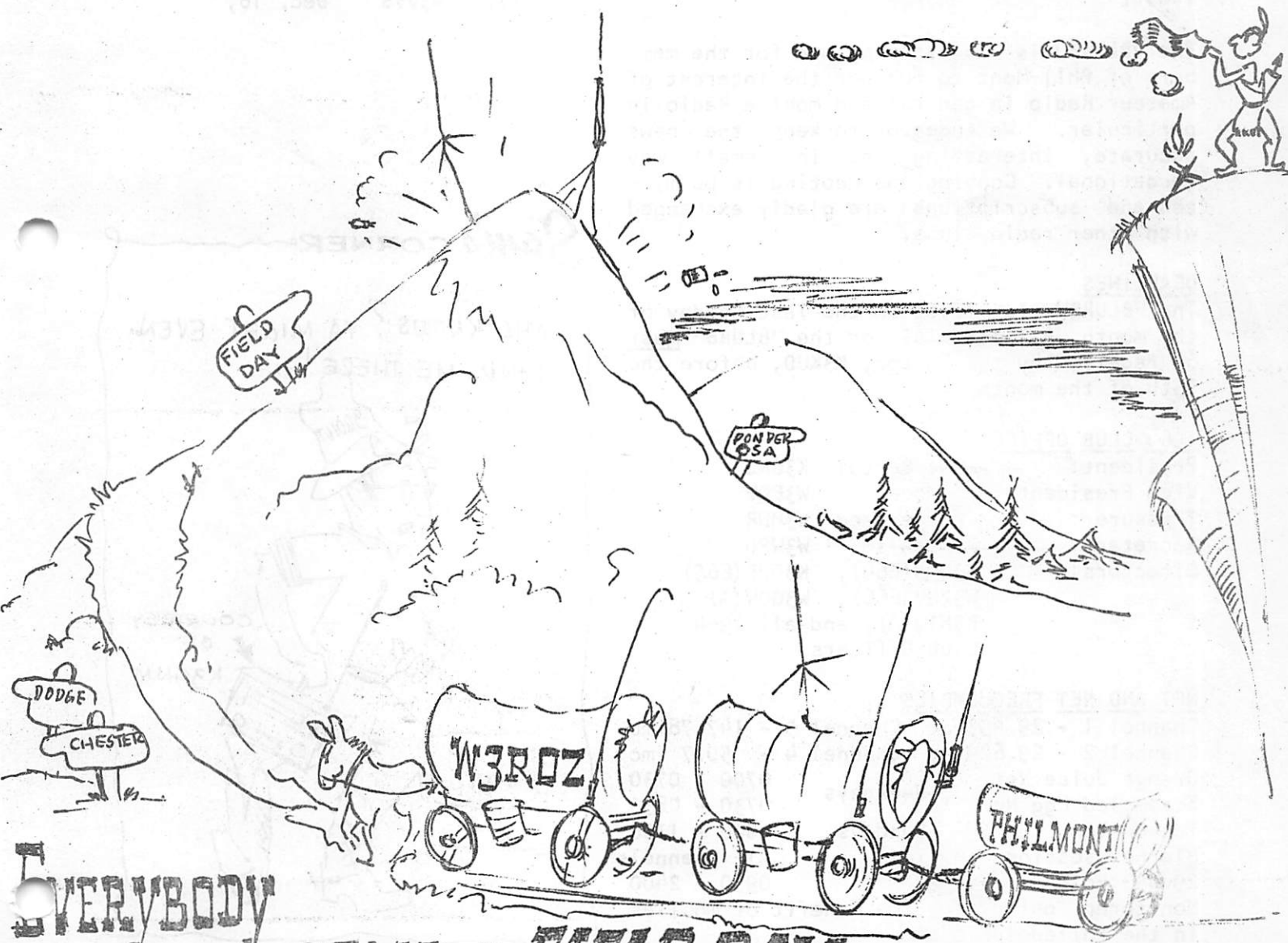


15<sup>TH</sup> Anniversary YEAR

# THE BLURB

AREA MEMBER

PHILMONT MOBILE RADIO CLUB INC.



EVERYBODY

SEND A FIELD DAY MESSAGE

JUNE 27-28

VOLUME 14

NUMBER 6

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528 Melody Lane  
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Boss Stitcher W3VVS  
Collator W3QQH  
Typist K3AUW

The "BLURB" is published by and for the members of Phil-Mont to further the interest of Amateur Radio in general and Mobile Radio in particular. We endeavor to keep the news accurate, interesting and in a small way educational. Copying and quoting is permitted and subscriptions are gladly exchanged with other radio clubs.

### DEADLINES

The "BLURB" is mailed on the last Monday of the month. All material for the "BLURB" must be received by the Editor, K3KUD, before the 15th of the month.

### 1964 CLUB OFFICERS

President: Enos Bartol K3GNJ  
Vice President: Ed Moore W3EQV  
Treasurer: George Weed W3MHR  
Secretary: Al Lewis W3WPD  
Directors: W3QQH (E64), K3DJE (E65)  
W3YHV (E66), W3GOW (A)  
K3HIJ (A), and all 1964  
Club Officers.

### NET AND NET FREQUENCIES

Channel 1 - 29.493 mc Channel 3 - 147.78 mc  
Channel 2 - 29.629 mc Channel 4 - 50.7 mc  
Orange Juice Net Weekdays 0700 - 0730  
Scrambled Egg Net 0730 - 0830  
Ten-on-Ten Sundays 1000 - 1100  
Blarney sessions anytime All Channels  
29.493 kc 0930 - 2400  
Monitored daily for the benefit of mobiles  
in the Philadelphia area.

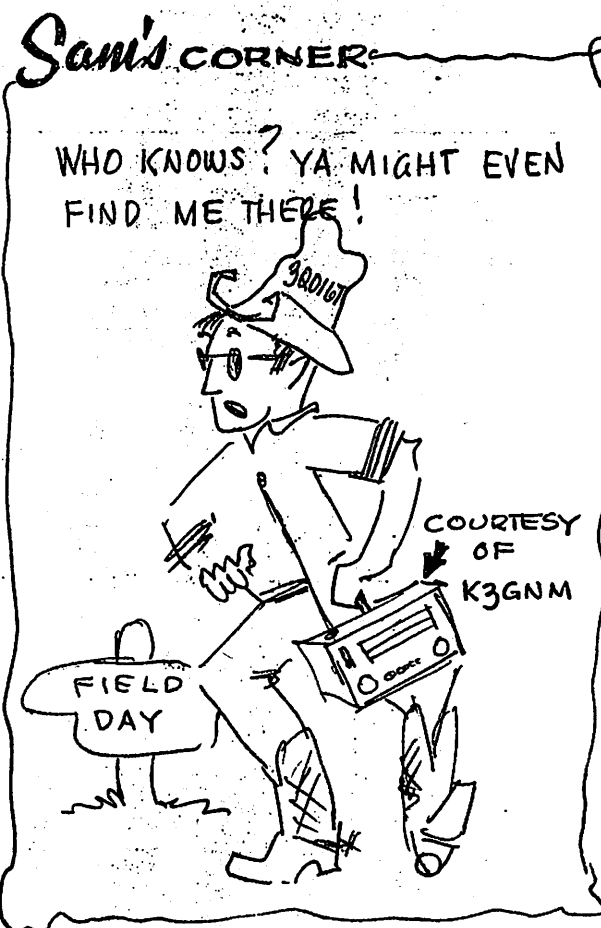
### PMRC CALENDAR

#### MEETINGS

Regular Meetings: First Monday of  
each month  
Time: 2000 hours (8:00 p.m.)  
Place: THE FRANKLIN INSTITUTE  
20 & Benjamin Franklin Parkway

#### MID-MONTH SCHEDULE

Feb. 12, W3QQH	July 15, W3NIP
March 18, K3OEJ	Aug. 19,
April 15, W3WNC	Sept. 16,
(Stag Dinner)	Oct. 14, W3GOW
May 13, W3MHR	Nov. 18,
June 17, W3VVS	Dec. 16,



PREZ SEZ

This month in place of the usual message from our president, this space will be used to perform a rather unpleasant task, namely the announcement of the resignation of Enie Bartol, K3GNJ, as president of Phil-Mont.

In a letter addressed to the club membership and presented to the Board of Directors at the May mid-month meeting, Enie cited an unexpected change in the location of his employment which will keep him away from this area for the next several months.

Knowing that he would be unable to perform the duties of his office with the full devotion and spirit which has always marked his work on behalf of Phil-Mont, Enie chose a course which must have been a difficult personal choice, but which he felt was in the best interest of the club.

The Directors regretfully accepted this resignation only after careful deliberation and with the express proviso that when his employment situation permits, Enie be urged to once again make himself available to serve Phil-Mont.

The Directors and the membership all wish Enie the very best, and thank him for once again demonstrating his interest in the welfare of the club.

To Ed Moore, W3EQV, who will serve as President of Phil-Mont for the balance of the year and to Al Hamilton, W3GIF, who will serve as Vice President, we offer our congratulations and full cooperation. We know that you will carry on and make this our biggest and best year.

de K3KUD

## NEWS AND ACTIVITIES

### Phil-Mont Calendar for June, 1964:

June 1	8:00 PM	Regular meeting at Franklin Institute
June 17	8:00 PM	Mid-month meeting at W3VVS
June 27, 28		Field Day
June 29	7:30 PM	BLURB folding at W3LEM

\* \* \* \* \*

A pat on the back to Bill Bubeck, W3YHV, whose perseverance and work has resulted in a much better looking BLURB. Bill and his "assistant", Bill Clayton, K3HIE, have worked hard to master the secrets of the Multilith and as a result they are now getting a good job in about half the time.

\* \* \* \* \*

The Second Alarmers Association of Montgomery County, with headquarters in Willow Grove, is looking for a Communications Officer. Anyone who is interested can contact the Second Alarmers, Davisville Road, Willow Grove.

\* \* \* \* \*

The regular meeting of the Phil-Mont Mobile Radio Club was held on May 4 at the Franklin Institute. Ed Moore, W3EQV, our vice-president, took over the reins in the absence of the president.

The feature of the evening was a presentation by Jack Brown, W3SHY, of Barker and Williamson. Jack's subject was the generation and detection of single-sideband signals. After a short talk on the subject, the meeting was opened to discussion and questions from the floor. Jack handled the subject well and made his presentation very interesting. Among the visitors present were Tom Consalvi, W3EOZ; Elmer Bush, W3FVF and George Hartenschied, W3KD, all representing Barker and Williamson. Jack also brought his wife Carolyn, to lend moral support and she made a most attractive addition to the group. John Llopes, W3GJF, was also present representing "Ham" Buerger who sponsored the meeting, which was our first "Distributor Night". Joe Elmaleh, K3HIJ, took time out from walking the floor with the new baby to demonstrate the operation of the remote control system for W3TKQ. Very interesting -- and it does work !

\* \* \* \* \*

Harold Hogan, W3ZN/NØSNB, reports that he attended the Dayton, Ohio, Ham-vention during the last weekend in April. Harold tells us that he wore his Phil-Mont identification badge and as a result, received a great many very complimentary remarks regarding the club. Harold was accompanied by Chief Billy Gray of Navy MARS who held a 4th Navy MARS District meeting during the convention. The convention was attended by over 3000 people and the banquet by over 600 people.

\* \* \* \* \*

## CLUB NEWS AND ACTIVITIES (continued)

The mid-month meeting for May was held at the home of George Weed, W3MHR. A great deal of important business was handled at this meeting, including the resignation of the president (see PREZ SEZ, this issue); the appointment of a new Directory Committee consisting of K3HIJ, HIE, SPS and W3MHR and the appointment of a new Activities Chairman, Bill Clayton, K3HIE. The Communications Trailer Committee reported that the trailer is about 50% completed and will be ready for Field Day. There are still four open mid-month dates, i.e. August, September, November and December. Anyone wishing to have one of these meetings at his home is requested to notify Ed Moore, W3EQV, or the editor.

\* \* \* \* \*

It has come to my attention that I recently overlooked two items which should have appeared in the BLURB. One was the talk by Kermit, W3AJQ, on modifications to the HRO-60 which he presented at the April meeting, and the other was the election to membership of Jim Bock, K3PHC. My apologies to you both. (ED)

\* \* \* \* \*

The regular meeting of the club will be held on June 1, at the Franklin Institute. The program will be "A Pot-Pourri of Ham's Activities" and will feature a group of short talks by club members concerning their interests and hobbies not directly connected with ham radio. We will also get a last minute run-down on schedules and procedures for Field Day.

\* \* \* \* \*

The Boy Scout Jamboree at Valley Forge will be held July 17-23. The scouts will operate amateur station K3BSA from the site during that period.

\* \* \* \* \*

Don't forget that a postcard indicating your call, class of license, date of expiration and address, will bring a reminder when renewal time comes around. Mail the card to The BLURB, 10 N. York Rd, Willow Grove, Pa.

\* \* \* \* \*

Since our last issue, Jim Hartmann, W3JYA, has had a rather serious bout with his appendix. We hope that Jim is back in good shape again and feeling fine.

\* \* \* \* \*

The Government Printing Office offers a publication entitled "Electron Tubes, Cross Index and Type Identification, MIL-HDBK-213A". The price is \$1.75 and the catalog number is D7.6/2:213A. This publication is available from the Superintendent of Documents, Washington, D.C.

\* \* \* \* \*

# TID-BITS

## **DX'ers Note:**

The following is a list of Amateur Radio Call Sign Prefixes for stations licensed by the United States Government, but located outside the limits of the Continental United States (i.e. U.S. military personnel at military bases, etc).

<u>PREFIX</u>	<u>LOCATION</u>	<u>LICENSING AUTHORITY</u>
KA2-KA9	Japan	Army
KG4USA-USZ	Antartica	Navy
KG1AA-LZ	Greenland	Air Force
KG4	Guantanamo Bay	Navy
KG6SA-SZ	Saipan	Navy
KG6TA-TZ	Tinian/Marianas	Navy
KL7FLA-FLE	NW Arctic Ice Islands	Air Force
KZ5	Canal Zone	Army
KB6	Baker, Canton, Howland, Enterbury	FCC
KG4AA-ZZ	Navassa Island	FCC
KG4AAA-AAF	Antartica	Nat'l Science Fdn.
KC6	Caroline Islands	Dep't of Interior
KG6A-H	Guam	FCC
KG6RA-RZ	Rota	Dep't of Interior
KH6	Hawaii	FCC
KJ6	Johnston	FCC
KL7	Alaska	FCC
KM6	Midway	FCC
KP4	Puerto Rico	FCC
KP6	Palmyra/Jarvis	FCC
KR8	Ryukyus/Okinawa	HICOMRYS
KS4	Swan/Serrana/Roncador	FCC
KS6	Samoa	FCC
KV4	Virgin Islands	FCC
KW6	Wake	FCC
KX6A-M	Kwajalein/Eniwetok	Dep't of Interior
KX6N-Z	Majuro/Marshalls (except above)	Dep't of Interior

\*\*\*\*\*

General Electric announces a new capacitor catalog which lists all types of GE aluminum electrolytic and Paper-Mylar capacitors. The catalog lists products by capacitance, voltage, length and diameter and also includes a special interchangeability section. Catalog ETR-2600B is available at any authorized GE distributor or from the General Electric Co., 3400 N. Milwaukee Ave., Chicago, Illinois.

\*\*\*\*\*

The operator to keep an eye on is the driver with the mike in the car behind the one ahead of you !

\*\*\*\*\*

## TID-BITS (continued)

The following is a reasonably complete listing of the exchange publications which are received each month by Ye Olde Editor. These publications are kept on file and are available to any club member simply by contacting the club historian, Wayne Ziegler.

<u>Publication</u>	<u>Organization</u>
Bandscanner	Ivy Ridge ARC
Mike and Key	Greater Cincinnati ARC
X-mitter	Bucks County ARC
Florida Skip	Ass'n of Florida Radio Clubs
MARSgram	Penna. Navy MARS
Static	North Penn ARC
Cheese Bits	Mt. Airy VHF Club
Spurious Radiations	Rockaway ARC (New York)
Auto-Call	Fdn for Amateur Radio
LARC Bulletin	Lockheed Employees RC (Calif.)
Bandspread	Marina ARC (Calif.)
Tickler	Adrian ARC (Michigan)
DVCARC Bulletin	Del. Valley Council of Radio Clubs
Reading Radio Bulletin	Reading RC (Penna.)
PRC Bulletin	Parma RC (Ohio)
Tri-State Radio Newsletter	Radio Ass'n of Erie (Penna.)
The Monitor	Mar-Jax Publishers

In addition we also receive NEDA News, Hallicrafters, Sams and GE product releases. As you can see, we really do get around these United States.

\* \* \* \* \*

## SPACE NOTES

The first Gemini capsule, recently orbited, had a weight of 7000 pounds and was a total of 19 feet high with its adapter.

The Gemini program will include approximately 12 orbital flights, 2 of them unmanned, 4 manned and 6 manned rendezvous flights. The next flight will be a down range (1850 miles) recovery shot and the third flight will be a 3 orbit manned program.

There are 18 tracking stations being used in this program, including two tracking ships.

\* \* \* \* \*

Echo II communication satellite has been successfully used for the transmission of radio signals and telephone speech between Jodrell Bank Observatory and Russia's Gorgi Astronomy Station. The transmission of radiophoto experiments are also scheduled. Echo II orbits the earth every 108 minutes and presently may be seen in the Delaware Valley area in a north to south or south to north pass in the western sky on any clear night from 8:00 PM to 12:00 M EDT. Exact times and directions can be found in the local newspapers.

\* \* \* \* \*

### NEW MEMBER APPLICATIONS

The following applications for membership have been received by the Membership Committee. Names are listed as they will appear in the Club Directory if the applicants are accepted.

K3RTR            Samuel Moskowitz            Sam-Anna  
401 Sansom St.  
Upper Darby, Pa.  
H-FL-2-0798  
Employed by: Retired (W3TKQ operator)  
Sponsored by: W3CDY, K3NYN

W3TJQ            Howard Unruh            Howard-Ethel  
517 Garfield Ave.  
Folcroft, Pa.  
H-LU-3-7632  
Employed by: Retired (W3TKQ operator)  
Sponsored by: W3CDY, W3ZN

W3YG            Paul Singewald            Paul-Ethel  
330 Maple Ave.  
Drexel Hill, Pa.  
H-CL-9-5906  
Employed by: Retired (W3TKQ operator)  
Sponsored by W3ZN, W3CDY

\* \* \* \* \*

### SWAP AND SHOP

For sale:            Johnson Match Box-Like New.            \$20.00

Charles Stouth, W3ZPP  
Phone: 265-2284

-----  
Wanted:            Anyone having a converter capable of  
receiving Philadelphia police frequencies  
(353-354 mc FM), usable in conjunction  
with an FM broadcast receiver, contact  
B. Elfman, W3CW; phone BA-8-3434, 3:15 to  
5:30 PM daily.  
-----

For sale:            Collins KWM-2 with built-in speaker  
in power supply.            \$850.00  
  
Gonset Twins            \$300.00

Hy Hecht, W3WNC

\* \* \* \* \*



Field Day is here again and we of PHILMONT hope to bring home a winner again this year. We are betting on the F/D Messages again and we need all of the messages we can get to do the trick.

1. We need a F/D Message from every member of the club, get your message to W3RQZ/M as early as possible preferably before midnight. A sample message is enclosed, use it as is and keep it for your records.

2. The message operation will work like a chain letter. W3RQZ/M will start the chain in motion on Saturday at mid-nite. He will pass all messages received at that time to W3AWH/M, who will be the first Philmonter to receive the messages. John will then have the number two man waiting at 12.30 A.M. to receive the messages. At the end of the line W3TKQ/M will be standing by, as late as necessary, to receive all messages.

3. If we get 75 messages to work with, every active mobile will be able to get 150 points for message handling and 25 points for initiating a message. To those that work hard for single contacts- you know a score like this is most rewarding.

4. In order to save time, the message forms furnished will require only a few entries. Make them accurate and only pass along the entries. It will not be necessary to read the complete message after the first one - so practice a little to make every second count.

5. With these planned arrangements, there are a few things to keep in mind.

a. You cannot relay your own message - so don't accept it - have it by passed around you to the fellow who follows you. This will prevent the loss of a message each time the relay is performed. In the event you are stuck with a message, give it to someone.

b. If possible, rendezvous with your relay station at close range and use channel 2 to run your traffic. If any difficulty arises, always return to channel 1 and RQZ/M for aid.

6. The field day rules are about the same as in the past. Use 30 Watts to get the best multiplier and keep your logs in good order.

7. The field day location is the same as last year, with food and refreshments at all hours.

#### Field Day Message Schedule

Time	Transmit	Receive	Time	Transmit	Receive
0000	W3RQZ	W3AWH	1130	W3NIP	W3ZPP
0030	W3AWH	W3CDY	1200	W3ZPP	W3YJM
0100	W3CDY	K3HIJ	1230	W3YJM	W3LNQ
0130	K3HIJ	W3WPD	1300	W3LNQ	K3GBA
0200	W3WPD	W3MHR	1330	K3GBA	W3D\$G
0230	W3MHR	K3UWO	1400	W3D\$G	W3JYA
0300	K3UWO	K3HIE	1430	W3JYA	W3AJO
0330	K3HIE	K3CEE	1500	W3AJO	K3DJE
0400	K3CEE	K3HWX	1530	K3DJE	
0430	K3HWX	W3HFX	1600		
0500	W3HFX		1630		
0530			1700		
0600		W3ZZI	1730		
0630	W3ZZI	W3YHV	1800		
0700	W3YHV	K3GNM	1830		W3TKQ
0730	K3GNM	WA2RDC			
0800	WA2RDC	W3ZEH			
0830	W3ZEH	W3QQH			
0900	W3QQH	W3GOW			
0930	W3GOW	W3EQV			
1000	W3EQV	W3GIF			
1030	W3GIF	W3BBB			
1100	W3BBB	W3NIP			

There Eight Slots Missing, Let's Get Them Filled!!!!!!

GET THE MESSAGES IN EARLY TO W3RQZ

If you have a late message schedule start late enough to cover.

PHILMONT  
FIELD  
DAY

THOMPSONS  
ORCHARD

TOURNISHIP  
ROAD

BEAN  
ROAD

NORTH  
ROAD

WALEES  
RD

RD

SKIPPACK  
PIKE

PENNA  
RD

DEKALB  
PIKE

PIKE

UNION ST

PIKE

HOOPER RD

RD

WALTON RD

WING  
FIELD

ROAD

NARCISSE

BUTLER

AVE

PIKE

ROAD

GERMANTOWN

SWEDES

PIKE

HOPEST

ATLANTIC THRIFT STORE

ARCH ST

TURN PIKE

JOLLY RD

BLUE BELL

PHILMONT RAMP  
CLUB  
FIELD DAY  
JUNE 27-28

STATE  
HOSPITAL

NORRISTOWN

JEFFERSONVILLE

AIRY ST

PIKE

PIKE

SANDY HILL

RD

JOHNSON

TURN PIKE EXTN.

PLYMOUTH RD

CONSHOHOCKEN



PLYMOUTH  
MEETING



THE AMERICAN RADIO RELAY LEAGUE

## RADIOGRAM

VIA AMATEUR RADIO



NUMBER 1	STATION OF ORIGIN	CHECK 23	PLACE OF ORIGIN Eastern Pennsylvania	TIME FILED	DATE
-------------	-------------------	-------------	---	------------	------

To  
Allen R. Breiner, W3ZRQ  
212 Race St.  
Tamaqua, Pa.

THIS RADIO MESSAGE WAS RECEIVED AT	
AMATEUR STATION	PHONE
OWNER	
STREET ADDRESS	
CITY AND STATE	

This mobile field day station is operating in Eastern Pa.  
with \_\_\_\_\_ operators assisting me. There are/is \_\_\_\_\_ AREC Member/s  
at this station.

Signature \_\_\_\_\_

Philmont Mobile Radio Club Inc.

SENDER'S ADDRESS AND PHONE NUMBER FOR REFERENCE

REC'D	FROM STATION	LOCATED AT	DATE	TIME	OPERATOR
SENT	TO STATION				

YOUR REPLY TO THIS MESSAGE WILL BE HANDLED WITHOUT CHARGE BY THE RECEIVING STATION WHOSE ADDRESS IS SHOWN ABOVE. AMATEUR RADIO OPERATORS AND MEMBERS OF THE A.R.R.L. LICENSED BY THE FEDERAL COMMUNICATIONS COMMISSION, OFFER TO THE PUBLIC A MESSAGE SERVICE WITHIN THE U. S. A. AND ITS POSSESSIONS WHERE POSSIBLE. AS MESSAGES ARE HANDLED BY RADIO AMATEURS SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A STATION OWNER, SO DELIVERY IS NOT GUARANTEED BY THE LEAGUE OR ITS MEMBER OPERATORS. AMATEURS ARE NOTED FOR THEIR WORK IN PUBLIC EMERGENCIES. FURTHER INFORMATION ON THIS INTERESTING HOBBY MAY BE OBTAINED DIRECTLY FROM A.R.R.L. HEADQUARTERS, WEST HARTFORD, CONN. LITHO. U.S.



THE AMERICAN RADIO RELAY LEAGUE

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Station.....

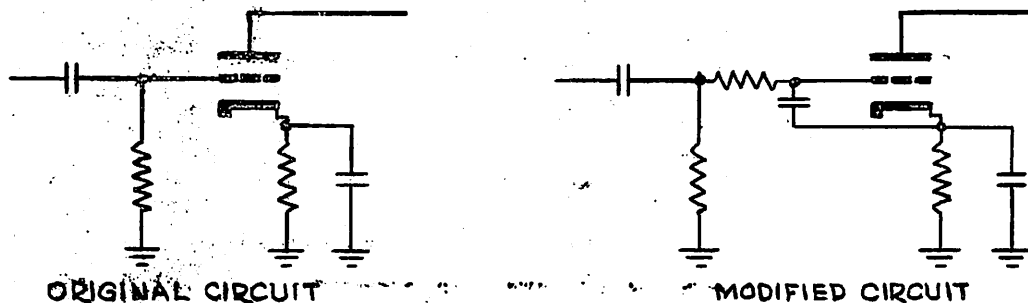
**Location.** .....

[illegible]

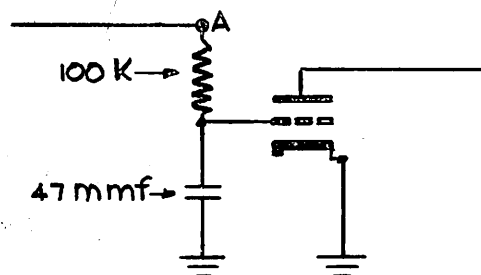
[illegible]

## AUDIO RECTIFICATION IN TV, STEREO, HI-FI &amp; RADIO

The grid circuit of an audio stage is generally high impedance and usually requires from a fraction of a volt to a few volts of bias. Any RF signal from a nearby radio station ( taxi, police, amateur or broadcast ), strong enough to overcome the bias or sufficiently large enough to cause grid current, will cause the tube to be biased in its non-linear area. The signal causing this change in bias will be rectified and, if there is any AM modulation on the signal, the modulation will be introduced in the audio system as audio and heard in the output.



The cure is to install sufficient RF bypassing to prevent the development of enough RF voltage to affect the bias of the tube. A convenient bypass for RF is to add a resistor and capacitor as shown above.



The resistor ( 70K to 100K ohms ) is added in series with the grid. The capacitor ( 50mmf to 250mmf ) is connected from the grid to the cathode. Leads of the added components should be as short as possible and the components connected in the circuit right on the socket of the tube involved. The action of the bypass is as follows:

For RF frequencies, the R and C form a voltage divider circuit. The C represents a small reactance so very little RF is developed across C and hence, applied to the grid. At audio frequency, the C is a much higher impedance so virtually all the audio voltage is developed across C and applied to the grid of the tube.

In Hi-Fi amplifiers, the 100K ohm resistor can be replaced with a .5 to 1.0 mh choke for improved performance.

## HOW TO CHECK FOR AUDIO RECTIFICATION

RF bypassing should be added to the stage, or stages that are picking up the interference. The way to determine which stage is involved is to remove tubes, one at a time, until the interference is gone or to short out the grid and see if the interference is eliminated.

The most likely stage is the first audio amplifier, if the interference is strong enough, more than one audio stage may be affected. This is particularly true in the case of stereo systems where at least two channels of audio amplification are involved. In cases where more than the first audio tube needs to be filtered, it is important that any added bypassing does not disturb the action of any phase inverter stage. Audio rectification is fairly easy to identify; it is generally present regardless of the channel setting or broadcast station setting. A sure way to test is to short out or remove an IF stage and, if the interference persists, it's audio rectification.

### OTHER POINT TO CHECK ARE:

1. Filaments in series string circuits should be properly bypassed to prevent signal from entering via the filament.
2. Screen grids and suppressor grids in pentode tubes should be properly bypassed.
3. If a tube shield is used, it should be checked for positive ground contact; also adding a tube shield is often helpful.
4. Both sides of the AC line may be bypassed to the chassis. A .01 mfd to .05 mfd, 600 volt capacitor can be used.
5. Long unshielded external speaker leads may pick up interference. Using shielded leads and grounding the shield will be helpful. The shield can be connected to the chassis in full power transformer sets and connected to chassis with .001 to .005 mfd mica capacitor in AC-DC chassis.
6. In HI-FI amplifiers, the feedback loop can pick up interference. Using shielded wire with the shield connected to the chassis via a .005 mfd capacitor will prove helpful.
7. In some cases, a volume or tone control shaft is not grounded. The interference will increase as the shaft, not the knob is touched. The cure is to install a control that has the shaft insulated from the potentiometer terminals, so the shaft can be properly bypassed. In full power transformer sets, the shaft can be grounded. In AC-DC sets, a .001 to .005 mica capacitor can be used.
8. In some cases, and only as a last resort, the grid resistor can be reduced in value. This applies only in cases using a 5 to 10 megohm grid resistor. The resistor can be reduced without seriously affecting the gain. However, the resistor should only be reduced as much as required and never lower than 2.2 megohms.
9. Before a television receiver is dismantled and efforts made to locate the source of the audio rectification, it is wise to disconnect the antenna and note if the interference is reduced or eliminated. If it is, there is a strong possibility that a properly installed high-pass filter, Drake-TV-300HP, or its equivalent will eliminate the source of RF from entering the system and further efforts will not be necessary.